

SYMBOLS

 Gleichspannung
DC Voltage

 Wechselfspannung
AC Voltage

CONNECTORS

2 SC 1344 (E)
2 SC 461 (B)
2 SC 535 (B)

2 SD 478 (C)

HA 1211
IC 201

TRANSISTOR PINOUTS

Output (Low)
Output (High)
Ground
Input (Low)
Input (High)

Vcc

HA 1137
IC 202

HA 1138
IC 151

HA 1156W
IC 301

66	67	68	69	70	71	72	73
E11	F13	J21	H11	J16	H18	H18	F13
3	24	25	26	27			
C3	D3	C2	D3				
17	18	19	20	21	22	23	24
C28	E29	D29	F28	E28	F28	F26	F22
F19							

Kennz.	Benennung	
100	AM Tuner / AM Teil	
200	ZF Verstärker	1 Platte
300	Stereo Decoder	
600	Ausgangsverstärker	
800	Netzteil	1 Platte
900	Anzeigeverstärker	

No.	Designation	
100	AM Tuner / AM Section	
200	AF Amplifier	1 Plate
300	Stereo Decoder	
600	Output Amplifier	
800	Power Supply	1 Plate
900	Meter Amplifier	

Wir behalten uns die Lieferung von Äquivalenttypen und von abweichenden Sockelschaltungen der Transistoren vor.
We reserve the right to supply equivalent types and basing variants for transistors.

UHER EG 750 stereo

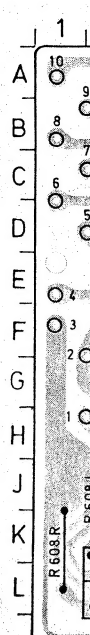
Stromlaufplan und Servicehinweise

Gültig ab Gerät Nr.: 175001001
Änderungen vorbehalten!

UHER WERKE MÜNCHEN 363-47717//DE/055/778-R

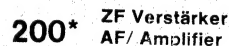
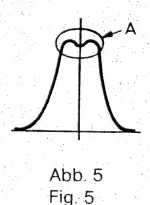
Circuit Diagram and Servicing Instructions

Valid from ser.no.: 175001001
Alterations reserved!

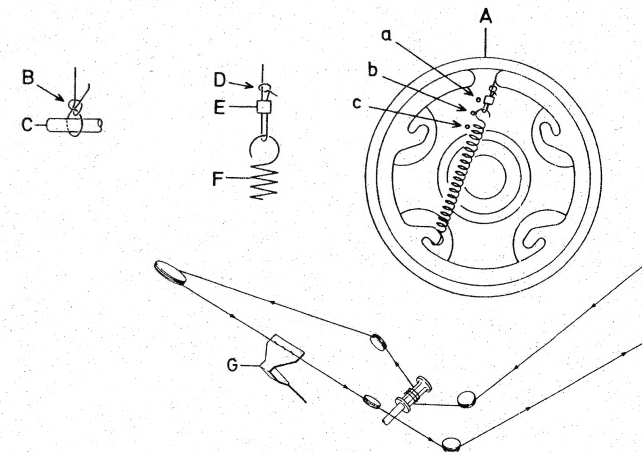


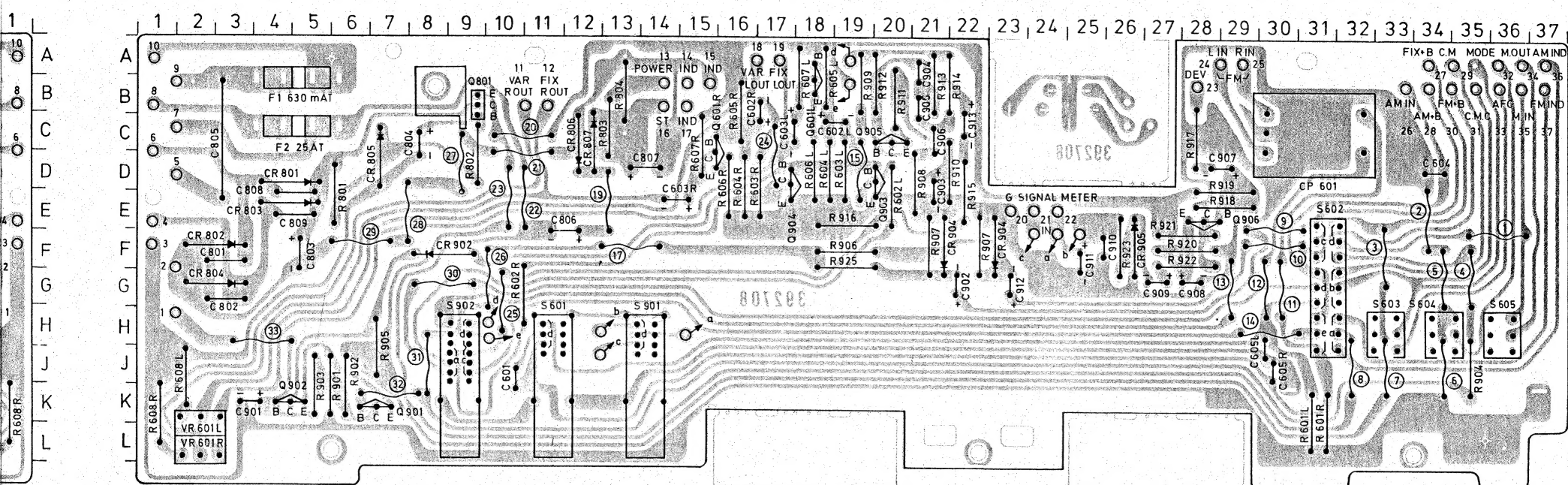
600**

Bestückungsseite **
Components side **



1.1.1 Connected series with 10 minimum with best down output 1 graph registers

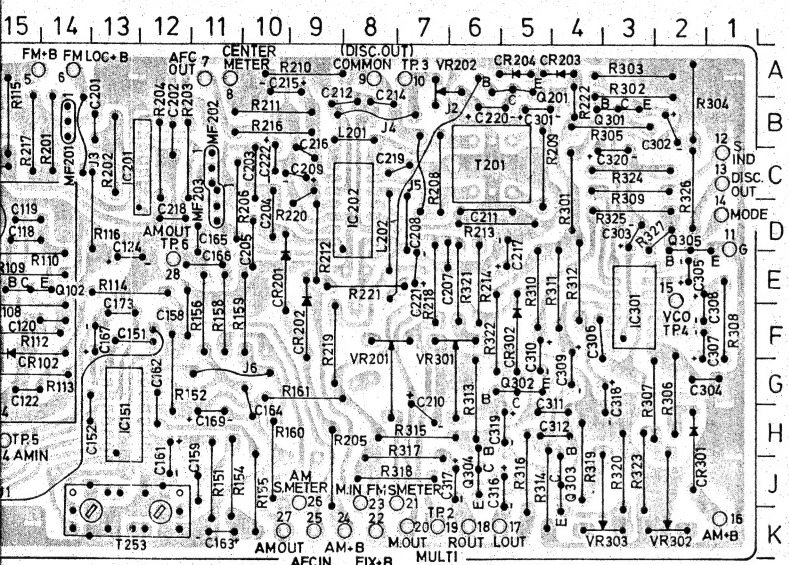




600** Ausgangsverstärker
Output Amplifier

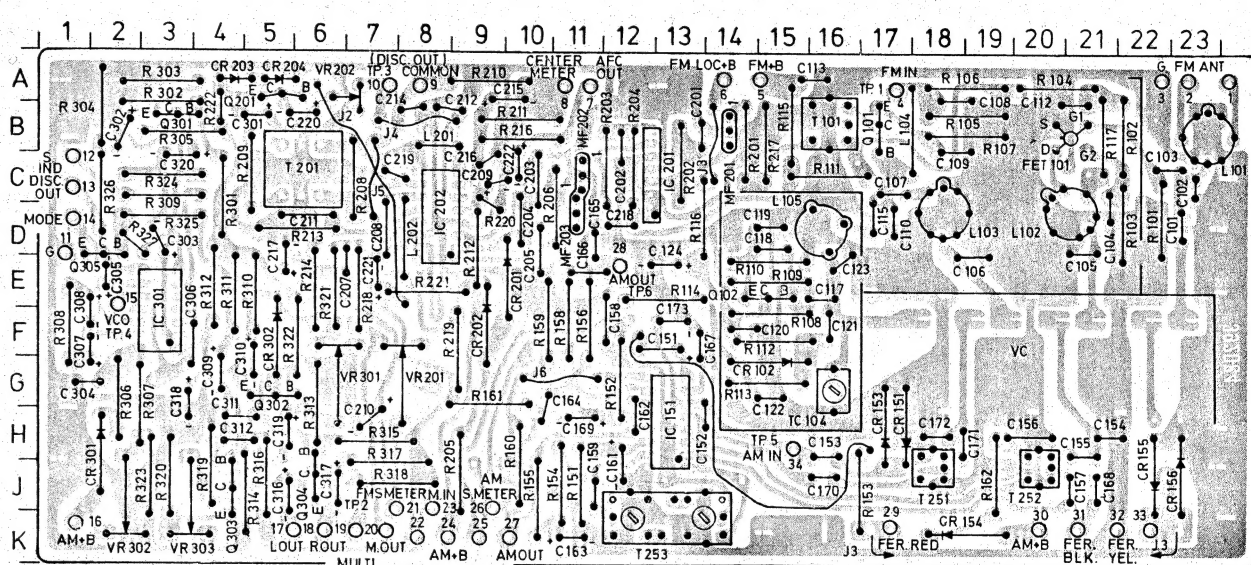
800** Netzteil
Power Supply

900** Anzeigeverstärker
Meter Amplifier



200** ZF Verstärker
AF/ Amplifier

300** Stereo Decoder
Stereo Decoder



100** AM Tuner/AM Teil
AM Tuner/AM Section

200** ZF Verstärker
AF/ Amplifier

300** Stereo Decoder
Stereo Decoder

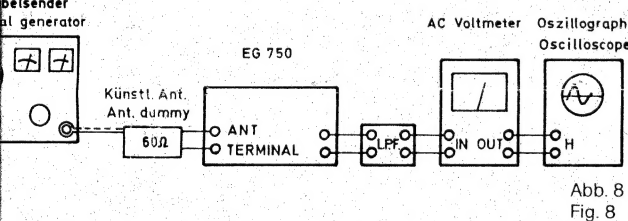


Abb. 8
Fig. 8

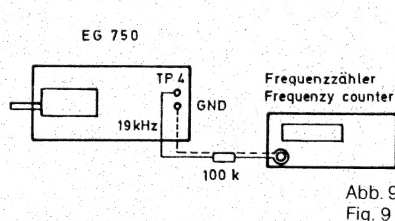


Abb. 9
Fig. 9

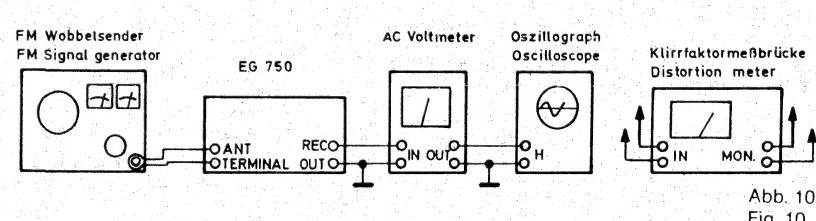


Abb. 10
Fig. 10

Alignment Instructions for AM/FM Stereo Tuner EG 750

Testing and adjusting points are located as seen in Fig. 1. Test setups should be as shown in Figs. 6 to 10.

1. Alignment of FM Section

Set the front-panel operating controls of the EG 750 into the following positions:

- Band Selector: UKW-FM, MUTING EIN (On)
- Output Level ("AUSGANGSPEGEL"): Minimum
- Power ("NETZ"): On
- Use 60-ohm input for feed-in.

1.1 I.F. Alignment

Connect sweep generator (10.7 MHz centre-tuning, ± 150 kHz deviation) in series with 0.1- μ F capacitor and 100-kohm resistor to test point TP 1 (Fig. 6). Shut out operation of the oscillator by shorting the rotor plate of the variable capacitor VC 104 to the case.

1.1.1 Connect oscilloscope to test point TP 2 in series with 100-kohm resistor. Tune T 101 to maximum with best transmission curve symmetry. Step down output level of sweep generator until oscilloscope registers a curve as shown in Fig. 2

1.1.2 Connect oscilloscope in series with 100-kohm resistor to test point TP 3. With primary circuit (lower) of T 201, adjust to symmetrical demodulation curve ("S"-shaped curve) as shown in Fig. 3. Adjust secondary circuit (upper) so that the discriminator curve forms a straight line between the two vertices (due to the use of ceramic i.f. filters the zero-axis crossing does not always lie at precisely 10.7 MHz).

1.2 Oscillator Alignment

Test setup as shown in Fig. 8. FM-signal modulation: 1 kHz/ ± 40 kHz deviation; antenna voltage: 1 mV.

- 1.2.1 Using L 105, adjust output to voltage maximum at 88 MHz.
- 1.2.2 Use TC 104 to adjust output to voltage maximum at 108 MHz.
- 1.2.3 Repeat alignment steps stated in 1.2.1 and 1.2.2

1.3 Tracking

Test setup as shown in Fig. 8; antenna voltage 3 μ V.

- 1.3.1 Using L 101, L 102 and L 103, adjust maximum output level at 90 MHz.
- 1.3.2 Using TC 101, TC 102 and TC 103, adjust to maximum output level at 106 MHz.
- 1.3.3 Repeat alignment steps stated in 1.3.1 and 1.3.2.

1.4 Discriminator Alignment

Test setup as shown in Fig. 8 with distortion bridge.

- 1.4.1 At approximately 98 MHz (without input signal), adjust primary (lower) circuit of T 201 so that the pointer of the "UKW-FM TUNING" meter is precisely in the centre.
- 1.4.2 At 98 MHz (modulation: 1 kHz/ ± 40 kHz deviation) adjust secondary (upper) circuit to minimum distortion.
- 1.4.3 Adjusting either the primary or the secondary circuit influences the alignment of the other. The alignment procedure should, therefore, be repeated until minimum distortion has been achieved and the pointer on the tuning meter is located precisely in the centre.

1.5 Adjustment of Output Voltage

Test setup as shown in Fig. 8. At 98 MHz (modulation: 1 kHz/ ± 40 kHz deviation) use variable resistor VR 202 to adjust output voltage to 650 mV at ± 1 dB.

1.6 Quiet Tuning

Test setup as shown in Fig. 8.

At 98 MHz (modulation: 1 kHz/ ± 40 kHz deviation; antenna voltage 16 μ V): Adjust resistor VR 301 so that the quiet tuning is without effect when the antenna signal is 16 μ V ± 6 dB.

1.7 Field Strength Meter

Test setup as shown in Fig. 8.

At 98 MHz and 3 μ V antenna voltage, tune resistor VR 201 so that the "SIGNAL/UKW-FM MULTIPATH" meter register 4-5.

1.8 Stereo Decoder

Test setup as shown in Figs. 9 and 10.

1.8.1 19-kHz Oscillator:

At 98 MHz (without modulation) and with 1 mV antenna voltage, connect a frequency meter to test point TP 4 then use resistor VR 302 to tune oscillator frequency to 19 kHz ± 30 Hz.

1.8.2 Channel Separation:

At 98 MHz (with modulation 1 kHz/ ± 40 kHz deviation and 19 kHz/ ± 6 kHz deviation) and antenna voltage 1 mV, pre-set VR 303 for minimum crosstalk between the right and left channels. Fine tune until crosstalk from right to left channel is the same as crosstalk from left to right channel.

2. Alignment of AM Section

Set front-panel operating controls of EG 750 to following positions:

- Band Selector: MW-AM
(With ferrite rod antenna swung out;
r.f. feed-in at antenna terminal as shown in Fig. 7)
- Output Level ("AUSGANGSPEGEL"): Minimum
- Power ("NETZ"): On

2.1 I.F. Alignment

Connect sweep generator (455 kHz centre frequency) to tuning capacitor TC 151. Adjust TC 151 to minimum capacity. Connect oscilloscope to test point TP 6.

2.1.1 Adjust red and blue alignment coils of T 253 until obtaining a curve as shown in Fig. 4 (due to the use of a ceramic i.f. filter the centre of the transmission curve does not always lie at precisely 455 kHz).

2.1.2 Step up output signal of sweep generator. Turn back alignment coils until the curve is deformed as shown in Fig. 5.

2.2 Oscillator Alignment

Test setup as shown in Fig. 7, with 30 % modulation of 400-Hz AM signal. Antenna voltage 300 μ V.

2.2.1 Using T 252, adjust to maximum output voltage at 600 kHz.

2.2.2 Using TC 152, adjust to maximum output level at 1400 kHz.

2.2.3 Repeat alignment steps of 2.2.1 and 2.2.2.

2.3 Tuning

2.3.1 Adjust TC 151 for maximum output level at 1400 kHz.

3. Replacing the Drive Cord (See Fig. 11)

Before a new drive cord may be installed, the variable capacitor must be turned up fully and the pulley (A) must be in the position shown in the illustration. Tie cord end (B) to pin (C). Then, introducing the cord in the direction of the arrow (as shown), insert cord end (D) through binding piece (E), knot it as illustrated and hang it in spring (F). It must come to rest between marker pins (a) and (b) of pulley (A). Next set the dial pointer on cord. Then, with the variable capacitor opened up fully, slide the pointer until it points to "100" at the right end of the scale.

UHER EG 750 stereo

**Abgleichsanweisung Alignment and Servicing
und Servicehinweise Instructions,
mit Leiterplatten PC Boards**

UHER WERKE MÜNCHEN 363-477171/DE/055/778-R